

REMARKS:

Claim 9 has been amended to state that the animal is administered flaxseed and cholesterol and that as a consequence of being fed this supplemented feed, the concentration of 18:3 omega-3 fatty acid in said animal becomes greater than 20% of all fatty acids. Support for this amendment may be found at least in Figures 3 and 4 and page 11, lines 4-9. Support for claim 15 may be found at least at page 15, lines 9-16.

Claims 9, 11, 12 and 14 were rejected under 35 USC 102(b) as anticipated by Weiss (US 4,918,104) in light of Kodali (US 6,303,803) and Silva (Cholesterol: A marker for the presence of animal material in feed).

Specifically, the office action states that Weiss disclosed 'a composition containing cholesterol from sources such as Menhaden fish oil, animal blend, soybean meal, gluten meal etc., and a source of omega-fatty acid, such as Menhaden fish oil, which is a deep-sea cold water fatty fish'.

The office action further states that Weiss 'does not disclose the percentage of cholesterol in the composition' but that Kodali teaches that 'fish oil contains high amounts of cholesterol 500-800 mg of cholesterol/100g, which is 0.5-0.8% (w/w). Thus, the concentration of cholesterol in a 10% fish oil diet can be as high as 0.08% (w/w)'.

The office action further states that Silva 'disclosed cholesterol could be found in high concentration in animal organ material and trace amounts in plants. For example, beef brain contains 1422 mg cholesterol/85g, which is 1.67% (w/w) of cholesterol, while beef liver contains 301mg of cholesterol/85g, which is 0.35% (w/w) of cholesterol. Thus, the concentration of cholesterol in a 6% animal blend can range from 0.10% to 0.021%, respectively.'

Based on this, the office action concludes that Weiss could inherently contain at least 0.1% of cholesterol (w/w).

Applicant respectfully notes that Weiss does not disclose flaxseed (column 2, line 66 to column 3, line 2) as a suitable metabolic precursor (although Weiss does disclose linseed oil). Furthermore, Weiss does not teach or suggest supplementing the animal feed with cholesterol rather as the examiner has noted the feed used by Weiss may contain some cholesterol. Finally, the 18:3 omega-3 fatty acid is linolenic acid and the values obtained by Weiss are lower than those obtained by applicant, that is, not greater than 20% (see Table 3 of Weiss).

Claim 9 was rejected under 35 USC 102(b) as anticipated by Ferrier (Am J Clin Nutr 62: 81-86) in light of Kodali (US 6,303,803).

Specifically, the office action states that Ferrier teaches significant increases of omega-3 fatty acids were seen when volunteers consumed eggs containing high amounts of omega-3 fatty acids and Kodali disclosed eggs contain 5.2 g cholesterol/100g, which is 5.2% (w/w).

Applicant respectfully notes that Ferrier teaches feeding hens ground flaxseed to increase the LNA and DHA levels in eggs and then feeding those eggs to human subjects. These subjects had increased levels of n-3 fatty acids. However, this is not applicant's invention. As discussed above, applicant teaches supplementing an animal feed with cholesterol and flaxseed which in turn results in LNA increasing to greater than 20% of total fatty acids. Had Ferrier supplemented the feed with cholesterol, the LNA levels in the resulting eggs would have been higher.

Claims 9, 11, 12 and 14 were rejected under 35 USC 102(b) as anticipated by Garg (J Nutr 118: 661-668).

The office action states that 'Garg disclosed a method of increasing uptake of omega-3 fatty acids ... in a rat comprised of: administering to an animal, such as a rat, a composition comprised of 0.12% or 0.2% (w/w) of cholesterol ... and 16% of omega-fatty acid

from a source such as linseed oil'.

Regarding Garg, it is respectfully noted that this reference examined the fatty acid composition of liver microsomal phospholipids and saw less than a 70% increase when linseed oil was fed in combination with high cholesterol (see Table 4 (approx. 70%) and Table 5 (approx. 15%)). Furthermore, this reference teaches that cholesterol supplementation of beef tallow and linseed oil diets led to inhibition of Δ^5 -desaturase, similar to the effect seen when fed a fish oil diet (paragraph bridging columns 1 and 2 on page 664). Thus, based on Garg, one of skill in the art would conclude that one wishing to inhibit the biosynthesis of 20:4 ω 6 from 18:2 ω 6 could supplement feed with either fish oil or a combination of linseed oil and cholesterol. However, Garg does not teach or suggest that administering to an animal feed supplemented with 0.1-5% (w/w) cholesterol and 0.1-25% flaxseed would result in the concentration of 18:3 omega-3 fatty acid in said animal being greater than 20% of all fatty acids as a result of administration of said supplemented feed to said animal.

It is believed that the above arguments and amendments overcome the cited references.

Further and more favorable consideration is respectfully requested.

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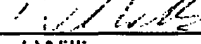
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